This Amendment serves to delete subject matter in the specification that is not necessary to support the claims. Substitute drawings are being submitted herewith to correspond to the deleted text in the specification.

Favorable examination of the claims on the merits is respectfully requested.

EXCEPT for issue fees payable under 37 C.F.R. § 1.18, the Commissioner is hereby authorized by this paper to charge any additional fees during the entire pendency of this application, including fees under 37 C.F.R. §§ 1.16 and 1.17 which may be required, including any required extension of time, fees, or credit any overpayment to Deposit Account 50-0310. This paragraph is intended to be a **CONSTRUCTIVE PETITION FOR EXTENSION OF TIME** in accordance with 37 C.F.R. § 1.136(a)(3).

Respectfully submitted,

MORGAN, LEWIS & BOCKIUS LLP

Dated: July 24, 2002

By: _____
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MARKED-UP VERSION UNDER 37 C.F.R. § 1.121 (C)(1)

In the Specification:

On page 19, please replace lines 1-5 with the following paragraph:

Figure 1, comprising Figures 1A, 1B, and 1C, [and 1D] is a series of formulae depicting the chemical structures of several anticancer agents. [Figure 1A depicts the chemical structure of BM21.1290.] Figure 1A[B] depicts the chemical structure of gemcitabine. Figure 1B[C] depicts the chemical structure of ara-C. Figure 1C[D] depicts the chemical structure of 5-azacytidine.

On page 19, please delete lines 15-24, as follows:

[Figure 5 is a graph depicting the concentrations of radiolabeled BM21.1290 in plasma and various lymphoid tissue samples after administration of radiolabeled BM21.1290 to female C57Bl/6 mice for a two week period. The data indicate the preferential uptake of BM21.1290 into lymphoid tissue of mice.

Figure 6 is a graph depicting the concentrations of radiolabeled BM21.1290 in plasma and brain tissue samples after administration of different doses of radiolabeled BM21.1290 to female C57Bl/6 mice for a two week period. The data indicate that the concentration of BM21.1290 in brain tissue samples is equivalent to the concentration of the compound in plasma, indicating that the compound effectively crosses the blood-brain barrier in mice.]

On page 19, please replace lines 25-26 with the following paragraph:

Figure 5[7], comprising Figures 5[7]A and 5[7]B, is a pair of formulae depicting the chemical structures of exemplary compounds of Formula III.

On page 20, please replace lines 1-2 with the following paragraph:

Figure 6[8], comprising Figures 6[8]A and 6[8]B, is a pair of formulae depicting the chemical structures of exemplary compounds of Formula IV.

On page 20, please replace lines 3-4 with the following paragraph:

Figure 7[9] is a formula depicting the chemical structure of an exemplary compound of Formula V.

On page 40, please replace lines 9-14 with the following paragraph:

Exemplary compounds having structures according to Formulae III , IV and V, are described herein in the Figures. These compounds can be prepared by the procedures described herein, or by variations thereof which are apparent to those skilled in the art in view of the instant disclosure. Structural formulae of exemplary compounds are shown in Figure **5**[7] (Formula III), Figure **6**[8] (Formula IV), and Figure **7**[9] (Formula V).

On page 64, line 6 to page 65, line 20, please delete the following:

[Example 4

Data from testing in animals indicating that the phospholipid-AZT conjugate BM21-1290 (see Figure 1A) is orally bioavailable and preferentially taken up into lymphoid tissues (lymphoma, spleen and thymus) is shown in Figure 5. Also, in rodents (mice) receiving oral administration of the conjugate, the compound has exhibited the ability to cross the blood-brain barrier and enter the brain. The data shown in Figure 6 indicates that the concentration of the conjugate compound BM21-1290 in the brain was found to be equivalent to the concentration of BM21-1290 in the plasma. In rodent experiments there was little or no detectable free AZT in the plasma. These data suggest that as a phospholipid-AZT conjugate the AZT is protected from glucuronide formation in the liver. The half-life of the conjugate compound in rodents was 48 hours compared to 30 minutes to 1 hour for AZT alone.

In another set of experiments the metabolism of the compound BM21-1290 using human lymphocytes in tissue culture was assessed. Results of these experiments indicated that the conjugate is metabolized to form an alkyl-lipid plus a phosphorylated species of AZT (i.e., AZT-MP, AZT-DP, AZT-TP and AZT). The predominant AZT species was AZT-MP with lesser amounts of AZT-DP, AZT-TP and AZT. These data suggest that phospholipid-AZT conjugates are metabolized intracellularly by a phospholipase C enzyme to yield a lipid and various species of AZT. AZT-MP can be activated to AZT-TP the inhibitor of HIV-1 induced reverse transcriptase.

Taken together, data from these experiments indicate that phospholipid-AZT conjugates are orally bioavailable, are preferentially taken up by lymphoid tissues, can cross the blood-brain barrier and are subsequently metabolized inside cells to yield an alkyl-lipid and AZT. Both the alkyl-lipid and AZT can function in double targeting the HIV-1 life cycle.]

On page 65, please replace line 22 with the following:

Example 4 [5]

On page 66, please replace line 4 with the following:

Example 5 [6]

On page 67, please replace line 1 with the following:

Example 6 [7]